

Amdt. dated November 20, 2003

Response to May 20, 2003 Office Action.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS

1. (Currently amended) A recombinant DNA molecule comprising a regulatory sequence of a promotor active in plants, a selectable marker DNA sequence encoding a 2-deoxyglucose-6-phosphate (2-DOG-6-P) phosphatase operably linked thereto and a further DNA sequence encoding a peptide, protein, antisense or sense RNA, viral RNA or a ribozyme.

2. (Currently amended) The ~~recombinant DNA molecule of claim 1~~ process of claim 10 or 39, wherein the sequence encoding the 2-DOG-6-P phosphatase ~~DNA sequence~~ is selected from the group consisting of:

- (a) a DNA sequence which encodes the amino acid sequence of SEQ ID NO: 2;
- (b) a DNA sequence of SEQ ID NO: 1;
- (c) a DNA sequence which hybridizes under stringent conditions in 6 x SSC under 55 °C to a complementary strand of the DNA sequence of (a) or (b);
- (d) a DNA sequence which is degenerate to the DNA sequence of (b) or (c); and
- (e) a DNA sequence encoding a polypeptide amino acid sequence that is at least 90% identical to the amino acid sequence of SEQ ID NO: 2 and having 2-DOG-6-P phosphatase activity.

3. (Currently amended) The process of recombinant DNA molecule of claim 1 or 2, wherein the DNA sequence is obtained from yeast.

4. (Currently amended) The ~~recombinant DNA molecule of claim 1 or 2~~ process of claim 10 or 39, wherein the promotor is a 35S CaMV promoter.

5. (Previously presented) A vector comprising the recombinant DNA molecule of claim 1 or 2.

6. (Original) The vector of claim 5 which contains at least one further recombinant DNA molecule.

7. (Currently amended) ~~The vector of claim 6~~ The process of claim 39, wherein the second further recombinant DNA molecule encodes a peptide, protein, antisense-[[,]] or sense-RNA, viral RNA or ribozyme.

8. (Previously presented) A host cell comprising the recombinant DNA molecule of claim 1 or 2, or a vector comprising said recombinant DNA molecule.

9. (Currently amended) A kit comprising ~~the recombinant DNA molecule of claim 1 or 2, or a vector comprising said recombinant DNA molecule and optionally comprising a DNA sequence comprising a regulatory sequence of a promotor active in plants and a sequence encoding a 2-deoxyglucose-6-phosphate (2-DOG-6-P) phosphatase operably linked thereto or a vector comprising said DNA sequence, and 2-deoxyglucose or a non-metabolizable analogue of glucose.~~

10. (Currently amended) A process for selecting a transformed plant cell, comprising the following steps:

- (a) obtaining a plant cells;
- (b) ~~introducing the recombinant DNA molecule of claim 1 or 2,~~ a DNA sequence comprising a promoter active in plants and a sequence encoding a 2-deoxyglucose-6-phosphate (2-DOG-6-P) phosphatase operably linked thereto, or a vector comprising said ~~recombinant DNA molecule~~ DNA sequence into said plant cells, under conditions that allow expression of the 2-DOG-6-P phosphatase; and
- (c) selecting the successfully transformed plant cell on ~~2-deoxyglucose containing media or on media containing a non-metabolizable analogue of glucose~~ a medium containing an analog of glucose which inhibits cell growth, and when phosphorylated, is a substrate of 2-DOG-6-P phosphatase.

11. (Currently amended) The process of claim 10 or 39, wherein the vector is transferred to plant cells via *Agrobacterium tumefaciens*.

12. (Currently amended) The process of claim 10 or 39, wherein the ~~recombinant DNA molecule~~ DNA sequence or vector is transferred to plant cells by particle bombardment.

13. (Previously presented) A transgenic plant cell comprising the recombinant DNA molecule of claim 1 or 2, or a vector comprising said recombinant DNA molecule.

14. (Currently amended) [[The]] A transgenic plant cell of claim 13 comprising a DNA sequence comprising a regulatory sequence of a promotor active in plants and a selectable marker sequence encoding a 2-deoxyglucose-6-phosphate (2-DOG-6-P) phosphatase operably linked thereto, and at least one further foreign gene DNA sequence encoding a peptide, protein, antisense or sense RNA, viral RNA or a ribozyme.

15. (Previously presented) A plant tissue comprising the plant cell of claim 13.

16. (Previously presented) A transgenic plant comprising the plant cell of claim 13.

17. (Previously presented) A product harvested from the transgenic plant of claim 16 comprising plant cells.

18. (Previously presented) A propagation material comprising the plant cell of claim 13.

19. (Currently amended) A method of producing a ~~transgenic plant~~, [[a]] the plant cell of claim 14 [[,]] tissue, or a combination thereof from the recombinant DNA molecule of claim 1 or 2, a vector comprising said recombinant DNA molecule comprising:

- a) obtaining a plant cell; and
- b) introducing the DNA sequence and the further DNA sequence ~~the recombinant DNA molecule~~ or vector into the plant cell.

20. Canceled.

21. (Currently amended) The ~~recombinant DNA molecule of claim 1 or 2~~ process of claim 10 or 39, wherein the DNA sequence further ~~comprising~~ comprises a regulatory sequence selected from the group consisting of a transcription termination sequence and a polyadenylation signal, or both, wherein said regulatory sequence is operably linked to the DNA sequence encoding said 2-deoxyglucose-6-phosphate phosphatase.

22. (Currently amended) The ~~recombinant DNA molecule of claim 1~~ process of claim 2, wherein the DNA sequence encodes the amino acid sequence of SEQ ID NO: 2.

23. (Currently amended) The ~~recombinant DNA molecule of claim 1~~ process of claim 2, wherein the DNA sequence is SEQ ID NO: 1.

24. (Currently amended) A transgenic plant cell produced according to the process of claim 10 or 39.

25. (Previously presented) A plant tissue comprising the plant cell of claim 14.

26. (Previously presented) A plant tissue comprising the plant cell of claim 24.

27. (Previously presented) A transgenic plant comprising the plant cell of claim 14.

28. (Previously presented) A transgenic plant comprising the plant cell of claim 24.

29. (Currently amended) The transgenic plant of claim [[16]] 27, wherein the plant is a monocotyledonous or dicotyledonous plant.

30. (Currently amended) The transgenic plant of claim [[16]] 27, wherein the plant is selected from the group consisting of wheat, barley, rice, rape, pea, maize, sugar beet, sugar cane and potato.

31. (Previously presented) A product harvested from the transgenic plant of claim 27 comprising plant cells.

32. (Previously presented) A propagation material comprising the plant cell of claim 14.

33-38. (Not entered)

39. (New) A process for selecting a transformed plant cell, comprising the following steps:

- (a) obtaining a plant cell;
- (b) introducing a DNA sequence comprising a promoter active in plants and a sequence encoding a 2-deoxyglucose-6-phosphate (2-DOG-6-P) phosphatase operably linked thereto, and a second recombinant DNA molecule into said plant cell, under conditions that allow expression of 2-DOG-6-P phosphatase; and
- (c) selecting the successfully transformed plant cell on a medium containing an analog of glucose which

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inhibits cell growth, and when phosphorylated, is a substrate of 2-DOG-6-P phosphatase.

40. (New) The process of claim 39, wherein the DNA sequence is on the same or separate vector as the second recombinant DNA molecule.

41. (New) The process of claim 10 or 39, wherein the analog of glucose is 2-deoxyglucose.